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Gambling with the nation's health?

The social impact of the National Lottery needs to be researched

The initial enthusiasm that greeted the National Lottery is giving way to cynicism in the face of bad publicity. The controversy about the payment of almost £13m for the Churchill archives[1] was followed rapidly by the suicide of a man who had forgotten to buy his ticket[2]; criticism by the Public Accounts Committee of the £20m cost of distributing funds[3]; publication of unexpectedly high profits by Camelot (the lottery's organiser)[4]; and, finally, the evidence of the personal problems associated with large winnings and, especially, the much publicised disputes in a family that won £18m.[5] While these dramatic events have captured the headlines, there is also a growing recognition that a system that takes a net £50m each week from the public may have adverse effects on society.

If the lottery widens inequalities of income it will have important implications for health, as shown by evidence of an association between inequality of income in industrialised countries and lower life expectancy.[6] Within the United Kingdom there is an enormous body of data on inequalities in health,[7] together with evidence that the health status of some age groups in the poorest areas has declined in recent years.[8] Many believe that the lottery will widen inequalities, with even the *Economist* noting that lotteries tend to gather money from poor people to be spent on amusements for wealthy people.[9]

So what is the evidence? A recent report on the impact of the lottery on society commissioned by the Joseph Rowntree Foundation seeks to provide it.[10] The first question is whether the lottery is regressive in that it takes a disproportionate share from the poorest people. On this the report offers little help. It notes that the lottery's regulatory body, OFLOT, is required to act on evidence of excessive participation by particular groups but also that no one has been given the job of collecting this information. Indeed, for the foreseeable future the only information will be that collected by Camelot —and that is commercially confidential.[11]

The evidence so far about the lottery's target population is largely indirect, such as the observation that children are particularly susceptible to sales of instant scratch cards and that 37% of children watch the National Lottery draw. There is much more evidence on the impact of lottery sales in the United States. This provides a rather complex picture. One study concluded that lotteries are "somewhat" regressive but that the highest level of participation was among the middle income group.[12] A large household study in Oregon found that the most frequent purchasers were the middle income group, but it also found that poor people spend a substantially higher proportion of household income on lottery tickets than the middle class and that lack of education was the strongest predictor of purchase.[13] A time series analysis showed that lottery sales increase with increasing unemployment.[14] Lotteries can consume a high proportion of household income—4·4% among heavy users in a study in New York.[15]

It is far from clear, however, that such results can be extrapolated to the United Kingdom. The creation of a gambling research unit, as urged by the report, seems necessary to fill this gap in our information. Such a unit should also not overlook the public health consequences of the lottery. Specifically, it should consider the extent to which the lottery is regressive, especially compared with other means of raising public funds, and it should examine the extent to which changes in disposable income affect consumption of other goods relevant to health—such as fruit and vegetables on the one hand and tobacco and alcohol on the other.

The second question is whether funds from the lottery benefit poor people—for example, by increasing access to sports facilities—or whether they go disproportionately to rich people. On this the report is clearer. As well as the more glaring examples of expenditure that benefit the rich, such as the grant to the Royal Opera House,[16] there is also more systematic evidence of bias. Allocations from the lottery fund, measured as both numbers of awards and their total value, increase from very low levels in the poorest tenth of electoral wards to high levels in the wealthiest. The report identifies many reasons for this, including the need to provide cofunding of capital and for recipients to cover subsequent revenue costs, both of which are easier for those who already have resources.

The component of lottery funds that supports charities is intended to redress this to some extent as the main beneficiaries are required to be disadvantaged groups and poor people. But these funds have been the last to be distributed, and any support from the lottery is unlikely to offset the loss from reduced charitable donations by the public, with the shortfall estimated at £57m a year.[10]

Donations to medical charities fall

Other potential health consequences arising from the lottery include the reduction in donations to medical charities and the additional social effects of the relaxation of controls on gambling. These were relaxed largely to protect existing

gambling companies and now allow longer opening hours for betting shops and for the shops to look more attractive, advertising of football pools, and a lower age limit at which people can play the pools.[10] This combination of measures has been associated with a reported increase of 17% in calls to Gamblers Anonymous.[17]

The sheer scale of expenditure on the National Lottery—over £100m a week, of which over £40m is spent on scratch cards—gives it the potential to be a major force for good or evil. There is an urgent need for detailed research on its redistributive effects and its impact on family expenditure. Anything that makes poor people in Britain even poorer, especially if they do not derive benefits in kind, becomes an important public health issue.

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Pathological gambling

An addiction to an altered psychological state

Neither gambling nor its problems are new to human history. Artefacts related to gambling dating from 3000 BC have been identified in the remains of ancient Babylon. Lotteries originated in Europe in the middle ages, and the first lottery to be sponsored by a government was chartered by Queen Elizabeth I of England in 1566.[1] Serious gambling problems are described in the classical literature of many cultures, such as the Hindu epic the *Mahabharata*. The Russian novelist Dostoevsky wrote his 1866 novella *The Gambler* in a desperate effort to repay his own gambling debts.[2] Yet despite the accelerating trend towards the legalisation of many types of wagering worldwide and the awareness that for some people gambling becomes a destructive addiction, little attention has been given to the prevention or treatment of its problems.

Gambling is big business in the United States, with about $330 000 million (£220 000 million) wagered in 1992.[3] Problems due to gambling are also widespread. The lifetime prevalence of pathological or compulsive gambling among the adult population in the United States is between about 3·5% and 6·3%.[4] The current prevalence is between 1·4% and 2·8%.[5] The disorder is more common in patients being treated for alcohol and other drug dependence, with a lifetime prevalence of 9% among adults and 14% among adolescent inpatients.[6 7] Although research into the epidemiology of this disorder is relatively recent, there are some indications that rates have risen in the United States with increases in the availability of gambling.[5]

Pathological gambling was first included in the official Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association in 1980. During the past 15 years its diagnostic criteria have been refined,[4] and a paper and pencil screening tool has become available for identifying gambling in general and clinical populations.[8 9]

Although pathological gambling has been conceptualised in several theoretical frameworks, it is widely understood as an addiction to the altered psychological state experienced while the gambler is in action. This state is described as a high similar to the effect of a stimulant drug and also as a feeling of dissociation permitting an escape from worries. The sensation may relate to increases in noradrenaline both peripherally and in the central nervous system.[1] As the disorder progresses the pathological gambler is increasingly preoccupied with betting; needs to increase the size of wagers to achieve the desired psychological effects; and finds that efforts to control, reduce, or stop gambling are unsuccessful. The pathological gambler characteristically gambles increasing amounts to try to win back lost money ("chasing losses").[11]

Gambling and the need for money with which to place bets interferes with other activities and personal relationships. The gambler may lie to conceal losses and steal money from family members and employers, rationalising this behaviour as temporary borrowing. Denial is typically used as a defence mechanism, as it is in other addictions. Restlessness, irritability, and somatic symptoms may occur when gambling is interrupted. Physical symptoms characteristically thought of as related to stress are common, as are comorbid psychoactive disorders such as suicidal depression.[11]

Treatment consists of a combination of professional and self help (Gamblers Anonymous, and Gamanon for families), and long term follow up is essential. Members of a pathological gambler's family also need help. Pathological gambling can usually be treated on an outpatient basis. Inpatient treatment in an addiction facility has also been found successful.[12] Commonly used treatments include psychoeducation; individual, group, and family counselling; stress management; relapse prevention; and referral to Gamblers Anonymous.

As Britain liberalises its gambling laws doctors should become informed about pathological gambling and its medical, social, and psychological consequences. There is scant professional recognition of pathological gambling and little in the way of organised treatment or research. A patient whose persistent gastrointestinal symptoms relate to uncontrolled gambling will therefore go untreated, and a family destroyed by gambling will be denied professional help. Medical leadership can reverse this trend and help develop the education, treatment, prevention, and research that are needed to confront pathological gambling. As gambling becomes more socially acceptable and more widely available, the need for doctors to tackle the associated problems will become more urgent.